CLAIMS

[1] A plasma processing apparatus (1) for applying a plasma process to a process target (W), comprising:

a process chamber (2) for applying a plasma process to said process target (W);

a mounting table (16), provided in said process chamber (2), for mounting thereon said process target (W);

a process gas supply unit (4) for supplying a process gas for applying the plasma process to said process target (W) into said process chamber (2);

a plasma generation unit (5, 7) for generating plasma of the process gas supplied by said process gas supply unit (4) by applying a high-frequency voltage; and

a dike (18) for confining the plasma generated by said plasma generation unit (5, 7) in an area above said process target (W) mounted on said mounting table (16),

wherein said dike (18) comprises a conductive member (18a) formed of a conductor, and said conductive member (18a) is grounded.

[2] The plasma processing apparatus (1) according to claim 1,

wherein said dike (18) comprises an insulating member (18b) which covers said conductive member (18a) and electrically insulates between said conductive member (18a) and said mounting table (16).

[3] The plasma processing apparatus (1) according to claim 1,

wherein said dike (18) comprises a protruding portion (18c) which is formed to be higher than said process target (W) mounted on said mounting table (16), so as to surround the area above said process target (W).

[4] The plasma processing apparatus (1) according to claim 1,

wherein an interval between a top end of said dike (18) and an inner wall of said process chamber (2) is 85 mm or smaller.

[5] The plasma processing apparatus according to claim 1, further comprising a

lifting unit (22, 24) for lifting up or down said dike (18) in said process chamber (2).

[6] The plasma processing apparatus according to claim 1, further comprising a lifting unit (22) for lifting up or down said dike (18) and said mounting table (16) in said process chamber (2).

[7] A multi-chamber system, wherein said plasma processing apparatus according to claim 1 is provided in at least one chamber.